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# CHRONICLE OF THE WORLD HEALTH ORGANIZATION

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## RECENT AND FORTHCOMING MEETINGS

**1950**

| | |
|---|---|
| 2-9 November | WHO Expert Committee on International Epidemiology and Quarantine, Legal Subcommittee, third session, Geneva |
| 6-7 November | WHO Expert Committee on the Unification of Pharmacopoeias, Subcommittee on Non-Proprietary Names, first session, Geneva |
| 6-11 November | WHO Expert Committee on Biological Standardization, fourth session, Geneva |
| 6-13 November | FAO/WHO Expert Panel on Brucellosis, first session, Washington |
| 27 November-9 December | Commission for Technical Co-operation in Africa, WHO Malaria Conference in Equatorial Africa, Kampala, Uganda |
| 11-12 December | Preparatory Working Group on a Public-Health Administration Seminar, Geneva |
| 11-16 December | WHO Expert Committee on Malaria, fourth session, Kampala, Uganda |
| 11-16 December | WHO Expert Committee on Mental Health, Subcommittee on Alcoholism, first session, Geneva |
| 11-16 December | Joint WHO/FAO Expert Group on Zoonoses, first session, Geneva |

**1951**

| | |
|---|---|
| 8-30 January | WHO Executive Board : Standing Committee on Administration and Finance, Geneva |
| 22 January-5 February | WHO Executive Board, seventh session, Geneva |
| 30 January | Léon Bernard Foundation Committee, Geneva |
| 9 April-5 May | WHO Special Committee to consider the Draft International Sanitary Regulations prepared by the Expert Committee on International Epidemiology and Quarantine, Geneva |
| 10-17 April | Joint FAO/WHO Expert Committee on Nutrition, second session, Rome |
| 19-28 April | WHO Expert Committee on the Unification of Pharmacopoeias, eighth session, Geneva |
| 30 April-1 May | WHO Expert Committee on the Unification of Pharmacopoeias, Subcommittee on Non-Proprietary Names, second session |
| May | WHO Expert Committee on International Epidemiology and Quarantine, Legal Subcommittee, fourth session, Geneva |
| 7 May | Fourth World Health Assembly, Geneva |
| 28-30 May | WHO Consultative Committee for Europe, Geneva |
| 31 May | Joint Committee on Health Policy, UNICEF/WHO, fifth session, Geneva |
| 4-16 June | WHO Executive Board, eighth session, Geneva |

# SEVENTH SESSION OF EXECUTIVE BOARD

The seventh session of the Executive Board, held in Geneva from 22 January to 5 February 1951, was presided over by Dr. H. S. Gear. Lt-Col. M. Jafar and Professeur M. De Laet were Vice-Chairmen ; Professor G. A. Canaperia served as Rapporteur. Major decisions were reached on the basis of recommendations of the Standing Committee on Administration and Finance, whose twelve-meeting session immediately preceded that of the Executive Board. This committee was composed of Dr. C. van den Berg, Dr. D. Boidé, Dr. F. J. Brady, Dr. C. K. Lakshmanan, Dr. M. Mackenzie, and Dr. A. Stampar. Dr. Stampar served as Chairman and Dr. Brady as Rapporteur. The absence, through illness, of the committee's Chairman, Sir Arcot Mudaliar, was noted with regret.

The Executive Board met in an atmosphere marked by an awareness of the " changed context in which the World Health Organization is now functioning ".[1] Apart from " political situations ... which have certain disrupting and complicating effects on the work of the Organization ", the Executive Board had to consider some of the recent developments which are likely to influence the programme, methods of work, and budget of WHO. Among these, the gradual change from centralized to decentralized planning and activities, the coming-into-being of the Technical Assistance Programme, and the increasingly close co-operation with organizations such as the United Nations International Children's Emergency Fund (UNICEF)—which has become, to a certain extent, a new international health organization—have all created new problems. In the words of the Director-General, " In effect, WHO is now dealing with the technical aspects of health programmes amounting to many millions of dollars, actually in the region of hundreds of millions of dollars ". The Executive Board therefore was concerned not only with considering a definite programme and the financial resources necessary for its implementation, but also with problems of international co-operation in health assistance on a much larger scale than ever before.

Budgetary considerations, always an important item, assumed new significance in the light of these new developments. The Board decided that the expenditure level for 1951 should remain at $6,150,000, plus an amount of $82,057 transferred from the Office International d'Hygiène Publique, making a total of $6,232,057. Finding new financial resources for the Organization has always been a major concern of delegates at the World Health Assemblies and of members of the Executive Board. The Third Health Assembly proposed that Member States might raise funds

[1] *Chron. World Hlth Org.* 1951, **5**, 3

by the sale to the public of special world-health stamps, labels, or flags.[2] The Board, at this session, gave its sanction to the proposal and officially suggested to Member Governments that, where possible, they should consider issuing special world-health stamps or labels and selling flags, the monies raised by these means to be divided between WHO and the national health-administrations on an agreed basis.

### Budget and Programme for 1952

By far the most controversial issue at meetings of both the Standing Committee on Administration and Finance and the Executive Board was the 1952 budget to be presented to the Fourth World Health Assembly. The Director-General had proposed a budget totalling $8,703,251, as compared with the $7,300,000 approved by the Third Health Assembly for the year 1951. This increase was warranted, the Director-General felt, by the necessity for WHO to expand and assume full responsibilities as an international health organization, particularly since other organizations and agencies were beginning to play an increasingly large role in international health programmes. Part of the proposed increase was due to provision in the 1952 budget for the technical personnel required in joint UNICEF/WHO projects, the services of which have been financed, in the past, largely by UNICEF funds. The Fourth Health Assembly will have to decide if and to what extent the budget should be increased for this purpose.

Those who opposed the increase in the budget maintained that it was unrealistic in view of the difficulties which some Member States had in meeting their financial obligations to the Organization and of the inactive status of ten of the Members. On the other side of the ledger, however, it was pointed out that the Regional Committee for South-East Asia had recommended a 20% increase in the budget and that Members of that region had indicated their willingness to increase their contributions accordingly.

After much discussion in sessions of both the Standing Committee and the Executive Board, a proposal which represented a 9% decrease in the Director-General's estimates was accepted. This meant that the total assessed budget for 1952 to be presented to the Fourth Health Assembly should amount to $8,600,000. If the Assembly decides not to assess certain Members of the Organization in 1952, the assessment budget should be $7,200,000.

In the course of deliberations concerning the 1952 budget and programme, it was emphasized that, with the exception of staff costs involved in providing international personnel which is withdrawn when WHO assistance terminates, budgets for demonstration projects should not

[2] *Chron. World Hlth Org.* 1950, 4, 203

exceed an amount which could reasonably be afforded by national governments in continuing the projects after outside aid has been withdrawn. Attention was also called to what is likely to become a major problem if the Organization's activities are greatly expanded—lack of adequate qualified personnel. The Director-General expressed the opinion, however, that the implementation of the proposed programme would depend more on "junior" personnel than on the services of highly trained experts, and he felt that the Organization was well equipped to meet the necessary requirements.

### Technical Assistance Programme

The Expanded Programme of Technical Assistance for the Economic Development of Underdeveloped Countries, which was discussed at considerable length at the Third World Health Assembly,[3] is taking an increasingly important part in WHO activities. The Executive Board examined a progress report on this programme and drew the attention of the Technical Assistance Committee to the desirability of examining the necessity for long-term planning and, in particular, for contributors to technical assistance funds to continue their contributions over a period of several years, so that participating organizations may initiate and carry out long-term projects. The progress report revealed that, as of 20 January 1951, WHO had received 51 requests, from 35 countries, for assistance under the provisions of the Technical Assistance Programme. These requests cover all aspects of public-health services. In planning its technical assistance programme, as in planning its regular programme, WHO is concentrating on projects which will be of the greatest value in developing adequate, self-supporting, national health services, taking into consideration the "absorptive capacity" of the countries receiving assistance.

### Continuing Needs of Children

One of the instances in which co-operation with other international organizations has resulted in numerous projects of considerable magnitude is in joint UNICEF/WHO activities. The financial resources of the former are large and have made possible a number of programmes in maternal and child health, malaria control, etc. The Executive Board welcomed additional indications of close co-operation with UNICEF and increasing co-ordination at the planning stage in assisting governments to develop their health programmes, resolved to draw the attention of the Fourth Health Assembly to the United Nations General Assembly resolution concerning the continuing needs of children, and recommended uninterrupted continuation of the Joint Committee on Health Policy, UNICEF/WHO.

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[3] *Chron. World Hlth Org.* 1950, **4**, 200

## Regional Organizations

The Executive Board noted that the Pan American Sanitary Conference, which acts as the WHO Regional Committee for the Americas, has decided to retain Washington as the site of the headquarters of the Pan American Sanitary Organization and that, as agreed with the United Nations, the Regional Office for the Americas will therefore continue to be located in Washington. Dr. F. L. Soper was reappointed as Director of this regional office for a period of four years, beginning 1 February 1951.

In considering the activities of the Western Pacific Region, the Board noted the rapid expansion of the facilities of the temporary office for the region but decided that, because of the present situation in that area, the proposed 1951 meeting of the Regional Committee for the Western Pacific would have to be postponed.

With regard to a regional organization for Europe, it was recommended that complete regionalization should not be undertaken at present. A consultative committee of representatives of the governments concerned will be convened in 1951 to discuss future plans for the Organization in Europe.

## Relief Activities

WHO's increasing number of relief activities, necessitated by political developments in various parts of the world, presents new problems—financially and administratively. The Executive Board approved extension of the agreement between the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWAPRNE) and WHO so that the Organization might continue to give aid to UNRWAPRNE projects relating to health. It endorsed the commitments made by the Director-General to the Secretary-General of the United Nations in connexion with relief for the civilian population in Korea and discussed ways and means of financing the supplemental budget for 1951 which this entails. It also dealt with a request from the Government of Turkey for aid in solving the health problems created by a recent influx of refugees from Bulgaria. This emergency has resulted from the Bulgarian Government's asking that Turkey admit, within a short space of time, 250,000 members of the Turkish minority living in Bulgaria. The WHO Executive Board authorized the Director-General to withdraw a sum not to exceed $55,000 from the Working Capital Fund to provide medical supplies to help in this emergency, use of the supplies to be supervised by a public-health officer provided through the Regional Office for the Eastern Mediterranean. It requested the Director-General to consult with the United Nations and other relevant agencies and non-governmental organizations on the proper way to handle this and similar emergency situations which may arise in the future.

## Expert Committees

The Executive Board examined the reports of the expert committees and other advisory groups which had met since its last session. Highlights from resolutions on these reports follow :

*Biological standardization*

The Director-General was requested to study : (*a*) the recognition of an international blood-grouping reference laboratory ; (*b*) the conversion of the International Salmonella Centre at the Statens Seruminstitut, Copenhagen, into an International Salmonella and Escherichia Centre ; and (*c*) the establishment of international shigella centres at Atlanta, Georgia, USA, and Oxford, United Kingdom.

*Mental health* [4]

It was decided that existing experiments in the training of public-health mental hygiene specialists should be studied and this subject placed on the agenda of a future meeting of the Expert Committee on Mental Health.

*Malaria*

The attention of the competent authorities of the Member Governments responsible for the administration of African territories is to be drawn to the desirability of initiating experimental schemes of malaria control and eventual vector-species eradication, WHO's willingness to consider giving technical assistance to an approved scheme being indicated.

*Subcommittee on Serology and Laboratory Aspects, Expert Committee on Venereal Infections and Treponematoses* [5]

Endorsement was given to the recommendations that descriptions of cardiolipin and lecithin be included in the *Pharmacopoea Internationalis* and that preliminary standards for these substances be established. Postponement of the International Serological Laboratory Conference was accepted until pilot experiments on the usefulness of freeze-dried sera for the evaluation of serological tests have been studied, since the plans for the conference might be changed if dried reference sera of various levels of sensitivity from syphilitics and non-syphilitics are proved to be adequate for evaluating serological tests.

*Unification of Pharmacopoeias*

The Board recommended to the Fourth World Health Assembly the taking-over by WHO, in application of Article 72 of the Constitution, of

[4] *Chron. World Hlth Org.* 1950, 4, 362
[5] *Chron. World Hlth Org.* 1950, 4, 367

the functions of the permanent International Pharmacopoeia Secretariat previously performed by the Belgian Pharmacopoeia Commission.

*Joint FAO/WHO Expert Panel on Brucellosis*

It was recommended that activities of the FAO/WHO brucellosis centres be developed along lines of research and training, and that the centres (*a*) co-ordinate field and laboratory procedures used in the study of brucellosis, and (*b*) undertake a worldwide survey on the prevalence of brucellosis in livestock and the measures being taken in various countries to combat the disease. Attention was called to the advisability of systematic reporting, by competent authorities, of the incidence of brucellosis in man and animals.

*Joint WHO/FAO Expert Group on Zoonoses*

The Board (*a*) called the attention of competent authorities to the appreciable contributions to public health and national economy which could be effected by practical measures against bovine tuberculosis, hydatidosis, and anthrax where these diseases are prevalent ; (*b*) stressed the importance of establishing satisfactory arrangements in national health-administrations so that special attention might be given to diseases of animals transmissible to man, and to the inspection and hygiene of foods of animal origin ; and (*c*) agreed that WHO undertake further study and co-ordination of international efforts, in collaboration with other specialized agencies and international organizations, wherever possible, to combat the major zoonoses for which activities have not already been undertaken, particularly virus encephalitides, tularaemia, and leptospirosis.

## Other Matters

The Executive Board approved, and transmitted to the Fourth Health Assembly, the general programme of work for the period 1952-5 inclusive.[6] This programme of work, the purpose of which is to supply broad, general lines of policy to serve as a framework for the development of detailed annual programmes and budgets for the period specified, has as general principles : (*a*) participation of all countries in the work of the Organization, (*b*) provision of services of a type to help governments to develop their own health services, (*c*) stimulation and co-ordination of medical and scientific research, and (*d*) availability of services to all Member States, without discrimination.

Certain diseases were given special consideration by the Board. The prevalence of tropical ulcer and the hampering effect of this disease on economic development in many parts of the world was called to the Board's

[6] *Off. Rec. World Hlth Org.* **25**, 30

attention by the Government of Haiti. Although budgetary limitations made it impossible to recommend that WHO subsidize research on tropical ulcer, the Board encouraged laboratories to undertake studies of the disease.

A memorandum on the problem of leprosy, submitted by the Government of the Republic of the Philippines, led the Executive Board to request the Director-General to place on the agenda of the Expert Committee on Leprosy, to be convened in 1952, the following topics : (*a*) the status of sulfone therapy-effectiveness of the different preparations in use, their dosage, side-effects, and manner of administration ; (*b*) the adoption of a generally acceptable classification of the disease ; (*c*) the adoption of fundamental principles as a guide in selecting methods of control in endemic countries ; and (*d*) the public-health significance of the changing of the lepromin test from negative to positive either by the application of sulfones or by BCG vaccination.

A study on the development of arid zones has been initiated by the United Nations, with the co-operation of the specialized agencies. The WHO Executive Board noted the resolution of the UN General Assembly on this project, pledged its support to UNESCO, emphasized the importance of early planning of programmes to prevent the introduction or aggravation of disease hazards caused by the development of arid zones, and called the attention of the Fourth World Health Assembly to this special problem.

It was recommended that the Tuberculosis Research Office, Copenhagen, which has done much valuable work,[7] be maintained, subject to review of the situation by the Executive Board every two years. The Board requested that special emphasis be given to control studies to determine the value of BCG vaccination, the duration of its effect, and related technical field and laboratory studies bearing directly on the evaluation and practice of BCG vaccination.

The establishment of pilot public-health centres, a proposal of the Government of the Republic of the Philippines, was approved by the Board as an effective method of helping underdeveloped countries to initiate public-health services. The Director-General was requested to consider this type of project when planning services with governments and developing the health demonstration areas proposed in the 1952 programme.

The Board also gave its approval to WHO's co-operation in plans for establishing international research laboratories, approving the policy on specific projects suggested by the Committee of Scientific Experts on International Research Laboratories, which was convened jointly by the United Nations and UNESCO in August 1949 and at the meeting of which WHO was represented.

The Executive Board noted with satisfaction the establishment of a health information centre by the Pacific Science Council, the executive body of the Pacific Science Association, which consists of representatives

[7] *Chron. World Hlth Org.* 1950, 4, 331

of the principal research and science organizations of Australia, Canada, France, Hawaii, Indochina (Viet-Nam), Indonesia, Japan, the Netherlands, New Zealand, the Philippines, the United Kingdom, and the USA.

The problem of refugee physicians, which was noted at the Third Health Assembly,[8] was again a subject of discussion. The Executive Board called the attention of Member States to the difficulties in the resettlement of refugee physicians and recommended that legislation be adopted to enable the services of duly qualified and acceptable medical personnel to be utilized. A " Medical Register ", giving personal details and qualifications of each refugee physician screened by the International Refugee Organization (IRO), is available through IRO.

The Executive Board discussed in some detail the agenda and working methods to be adopted at the Fourth World Health Assembly. It was decided that technical discussions would be confined to the subject of the education and training of medical and public-health personnel. Interpretation into Spanish will be used for the first time at the Assembly.

The eighth session of the Executive Board, it was tentatively decided, would be held in Geneva beginning 4 June 1951.

[8] *Chron. World Hlth Org.* 1950, 4, 236

## WHO ACTIVITIES IN SOUTH-EAST ASIA

The WHO Regional Organization for South-East Asia was established in October 1948 and the Regional Office opened in New Delhi in January 1949. The Regional Committee, at present composed of representatives of Afghanistan, Burma, Ceylon, India, Indonesia, Thailand, and French and Portuguese India, recently held its third session in Ceylon.[1]

The South-East Asia Regional Office gave WHO its first experience in decentralization and therefore demanded much pioneer work. Direct assistance to national governments in the form of advisory and demonstration services was new to international health work and required the development of new techniques in co-operation and new attitudes on the part of both the international staff and the national health-administrations. Largely as a result of the experience gained by the South-East Asia Regional Office, which was established early, WHO has now decided to carry its regionalization policy further and to make regional offices entirely responsible for their own administrations and budgets, and, in co-operation with the regional committee, for drawing up as well as executing regional programmes, a minimum of guidance being given by Headquarters.

[1] *Chron. World Hlth Org.* 1950, 4, 370

The South-East Asia Regional Office now has a staff of 15 members —from nine different countries—including nine senior officers responsible for policy, administration, programme execution, etc., and six specialist advisers in maternal and child health, venereal diseases, tuberculosis, nursing, malaria, and environmental sanitation.

Co-operation and co-ordination are maintained with UNESCO, FAO, UNICEF, and ILO. A very close relationship exists with UNICEF, and an increasing number of health projects under the technical direction of WHO are using supplies, equipment, and, in some cases, personnel financed

**FIG. 1. WHO IN SOUTH-EAST ASIA — I**

Washing arrangements are simple, but these children are learning to use them as part of a WHO health-education project

by the former. At present joint projects are already operating, or are being planned, in malaria control, maternal and child health, yaws control, and tuberculosis training centres. In addition, WHO has accepted the responsibility of administering UNICEF fellowships in health subjects.

## Malaria

Demonstrations of malaria control in rural areas, utilizing DDT, were launched in 1949 by six international teams—four in India, one in Thailand, and one in Afghanistan. All but the last are joint projects with UNICEF.

The aims of WHO malaria-control projects are : (1) to demonstrate the increased effectiveness of large-scale operations in rural malaria-control ; (2) to establish the most lasting method of disinsectization under local

conditions ; (3) to initiate measures to improve general sanitation in villages and to increase food production, through rural public-health organizations ; and (4) to train local workers who will be responsible for carrying on and extending the operations to the surrounding areas.

*India*

*Terai.* The project in Terai was the first of its kind in the world. Operations now cover an area of about 3,885 square kilometres which has a population of 110,000. Examination of blood-smears of 3,000 infants has revealed a reduction in malaria endemicity from 60% to nil in the sprayed villages. A considerable extension of the work is contemplated, with the assistance of FAO.

*Jeypore Hills.* Operations in this area cover about 1,709 square kilometres with a population of approximately 120,000. It is an area of high malaria endemicity, the spleen index being more than 90%. *A. fluviatilis*, the responsible vector, has now completely disappeared from all sprayed villages, although its density remains high in the control area.

*Malnad.* Malnad is located in the north-western part of Mysore, where a very scattered population was suffering from fever to such a degree that no extension of cultivation was possible. WHO's operations cover 4,144 square kilometres and serve a population of about 140,000. Complete disappearance of the vector has resulted in general improvement of local conditions. Malaria has not been detected in any of the babies born since spraying operations began.

*Ernad.* This is in the Malabar District, in the foothills of the Western Ghats. The area concerned is 368 square kilometres, with a population of about 63,000. It is a typical focus of high malaria endemicity from which the disease is found to be spreading to the low regions, so that malaria control in these sparsely populated foothills means the protection of many hundreds of thousands of people in the adjoining areas. In the sprayed area, the infant parasite-rate is now nil ; and *A. fluviatilis*, the local vector, appears to have been completely eradicated. The Government of Mysore is taking over the work this spring.

*Thailand*

The Thailand project is being conducted in the comparatively small Sarapee district of Chiengmai Province. In spite of a very dense population, totalling about 40,000, any extension of rice cultivation was prevented because of high incidence of fever at harvest-time. From the first year of spraying operations, *A. minimus*, the responsible vector, completely disappeared from the sprayed area, although its density continued to be high in the control area. A striking improvement in general health

conditions has led the Government of Thailand to undertake a large extension of the work.

*Afghanistan*

Teams have been operating in two different regions of Afghanistan. In 1949, a pilot team in the Laghman area concentrated on careful checking of the possible results of indoor spraying in a community in which the population sleeps outdoors every night during the malaria season. Complete success was recorded in the first year by killing the vector, *A. superpictus*, in the houses where it was found to rest during the day.

In 1950, a full-strength WHO team undertook another, equally successful, malaria-control operation among the 70,000 population of the Khundus-Khanabad area in North Afghanistan. Although it is too early for final assessment of results, it may be stated that in all areas the spleen indices among children have been reduced by 50%. The immediate disappearance of severe cases of malaria in adults, and of fresh cases among infants, has so impressed the populations concerned that the spraying squads are now welcomed everywhere.

Public-health nurses attached to each demonstration team have been able to organize maternal and child health clinics in many villages. Each team's headquarters is a small training centre to which local workers are sent for refresher courses and demonstrations.

## Treponematoses

In 1949, the first WHO venereal-disease team to be sent into the field established its laboratory and headquarters in Simla, central point of the new Himachal Pradesh State in the hills of North India. Mass blood-testing carried out by the international team, in conjunction with the very able staff provided by the Indian Government, soon confirmed a long-standing impression that syphilis was widespread in the hill communities. Granuloma inguinale, the presence of which has been known in the area from the time when Donovan described the lesions in another part of India, was also encountered in hospitals and during examinations of people in the villages.

The dramatic response of both of these diseases to antibiotics, which for the first time were available free of charge to the people of the area, was rapidly publicized. As a result, it was not unusual for patients to come from long distances to the central clinic that had been established in Simla.

The clinic and laboratory at Simla served as a training centre for workers from India and other countries in the region. With the help of UNICEF, a programme was planned to supply each State whose trainees had completed the requisite " course " at Simla with minimum laboratory equipment and drugs so that similar projects might be undertaken when

the trainees returned to their countries. The laboratory served to make widely known the simpler slide-test techniques ; and valuable experience was gained in field testing, using the Meinicke test and cardiolipin antigens. The laboratory also functioned as a reference serological laboratory and exchanged samples with other laboratories in India and elsewhere.

One of the highlights of the project was the selection of an isolated community for mass testing and treatment operations. The community yielded a seropositive rate as high as 60% in adults. Treatment was given, using one injection of 300,000 units of procaine penicillin G in oil with 2% aluminium monostearate. Although the community's resistance to blood-testing has made evaluations difficult, data collected to date, after a year's follow-up, leave no doubt that, as a public-health measure, such a mass-treatment approach has much to commend it.

*Yaws control*

Nationwide yaws-control programmes have been established in Indonesia, where the incidence is 21.3%, and in Thailand, where the incidence is estimated at about 20%. Since May 1950, when the Indonesian project was launched, more than 35,000 injections of penicillin have been given in treating a population of 200,000. In Thailand, 11,300 cases have been treated since July 1950.

In both projects, team headquarters usually serve as a training centre for field teams composed each of eight medical workers, nurses, or sanitary inspectors, headed, wherever possible, by doctors. Ten such teams have already been trained in Indonesia, and three in Thailand. In each area, a " control group " is being established to attempt to solve specific problems.

It is hoped that, when lower incidence of the disease has been achieved, continued control will be effected by keeping a careful watch on patients being treated at the policlinics or health dispensaries in the areas concerned and by keeping one team in readiness in each province or State to deal with any increase in the disease as, and when, it is detected.

## Tuberculosis

A mass BCG-vaccination campaign which was started by the Joint Enterprise (International Tuberculosis Campaign) [2] early in 1949 is to be continued until the end of June 1951. In this campaign about 90 Indian teams have been trained, 2,511,089 persons have been tuberculin-tested, 1,209,179 persons have been found positive, and 848,296 persons have been vaccinated. It is understood that the Indian Government intends to continue and to extend the campaign after the International Tuberculosis Campaign ceases to function.

[2] *Chron. World Hlth Org.* 1951, **5**, 18

BCG vaccination will be fully integrated into the work of six UNICEF/WHO tuberculosis training centres which are to be opened in South-East Asia during 1951. The object of these centres is to provide in each country of the region one or more model centres, with modern equipment, where international personnel will demonstrate up-to-date methods of tuberculosis control and will train local teams, give postgraduate instruction to individual specialists, train nurses and technicians, and offer refresher courses to general practitioners. The keynote of the work at the centres will be team activity such as has been the main feature of effective tuberculosis control in the Scandinavian countries and elsewhere. It is hoped that centres in Delhi and Trivandrum will be opened early in 1951 ; a third centre is to be established at Patna a couple of months later. Centres planned for Ceylon (Colombo), Burma (Rangoon), and Thailand (Bangkok) should also be started during the first half of 1951.[3] BCG vaccination has already been introduced in Ceylon, and this project will be grafted onto the general tuberculosis programme, as in the case of India. Vaccination against tuberculosis has not yet been undertaken in Burma and Thailand, however, and it is intended to import BCG teams for demonstration and training in vaccination and to link their activities with the other work of the centres.

A field demonstration project and, later, a BCG vaccination team are planned for Afghanistan. A BCG project is also planned for Indonesia.

### Typhus

In July 1949, louse-borne typhus, which is always present in Afghanistan, flared up to epidemic proportions. At the request of the Afghan Government, WHO sent antityphus vaccine, DDT powder, and dust-guns. Typhus-control activities were continued during 1949-50, WHO medical officers and sanitarians being sent to assist in organizing and carrying out an antityphus campaign.

WHO malaria team members are actively engaged during the winter months in taking preventive measures against any possible outbreak of typhus in Kabul and Kandahar.

### Maternal and Child Health

The countries of the South-East Asia Region have, on the whole, a high incidence of death and disease among infants and children. In Afghanistan, Burma, and Indonesia, where registration of deaths is either non-existent or incomplete, infant mortality-rates are estimated at 450, 360, and 300 per 1,000 live-births respectively. In India, Ceylon, and Thailand, where there is registration, the infant mortality-rate has shown a steady

[3] See page 62.

**FIG. 2. WHO IN SOUTH-EAST ASIA — II**

Dr. Cicely Williams, Maternal and ChildH ealth Adviser at the South-East Asia Re gional Office, examines a child suffering from pellagra

reduction over the last ten years. For 1948 it is given as 120, 86, and 65, respectively.

The outstanding factor is that even where the infant mortality-rate is not, by western standards, excessive, mortality in the 1-4-year age-group is relatively very high. For instance, in Ceylon where the infant mortality-rate represents 27.6% of the total deaths (compare with 13.5% in Canada), the mortality in the 1-4-year age-group is 13.7% (compare with 2.6% in Canada). These figures reflect the tendency to pay but scant attention to the development of paediatrics, clinical or social. Whereas there are many well-trained obstetricians, many of whom have very remunerative private practices, there are very few paediatricians. So-called " health visitors " have, in many places, had no training in nursing—apart from midwifery—which is another grave handicap to the work. Fortunately some doctors and nutritionists are now becoming interested in nutritional problems in children.

Public-health nurses attached to the UNICEF/WHO malaria demonstration teams in South-East Asia have done magnificent work under very difficult conditions. They have not only facilitated the antimalaria operations, but they have shown, in no uncertain way, what can be accomplished both in preventive and curative medicine and in school health by properly trained " health visitors ".

At present there are a WHO paediatrician and a WHO public-health nurse living in a village, Najafgarh, about 14 miles from Delhi. They have been helping to organize a rural training centre for about 60 students from the Delhi College of Nursing and the Lady Reading Health School. There are also a WHO paediatric nurse and a paediatrician working with the staff at the Irwin Hospital, Delhi, and helping to teach child care. It is hoped to expand these training programmes, to organize postgraduate courses in clinical and social paediatrics for doctors, nurses, and " health visitors ", and to co-operate with the Government of India Education Department in health education and social work.

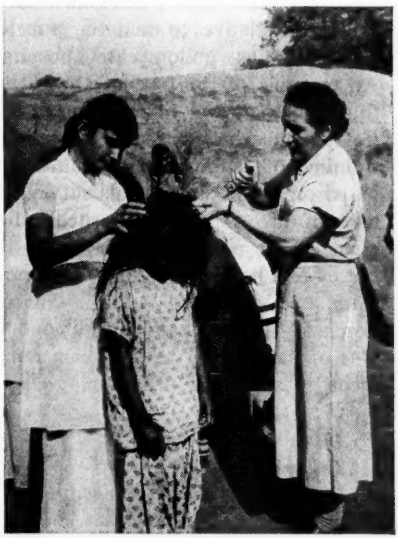
A UNICEF/WHO pilot team of one clinical pathologist and obstetrician and a public-health nurse has gone to Afghanistan to make a survey of

maternal and child health needs and, possibly, to expand the existing training facilities for health personnel.

Brief surveys have been made in Burma, Ceylon, Indonesia, and Thailand, and plans have been made for WHO and UNICEF assistance in maternal and child health activities in these countries.

The All India Institute of Hygiene and Public Health in Calcutta has had WHO expert assistance in planning much-needed expansion of its maternal and child health training facilities. UNICEF is making a substantial contribution in equipment and personnel for this project, which is expected to provide an international training centre which will co-ordinate the work of paediatricians and obstetricians with that of urban and rural health centres.

**FIG. 3. WHO IN SOUTH-EAST ASIA — III**



WHO public-health nurse, Miss M. J. Heafey, demonstrates delousing techniques to students of the Delhi College of Nursing

## Nursing

Further development of training facilities for nurses and effective use of nurses in South-East Asia constitute a health problem which is becoming more acute in view of the growing need for nurses and the financial difficulties involved in increasing, or even maintaining, their present numbers. With few exceptions the quality of teaching in the nursing schools does not come up to desired standards, and understaffing often destroys the satisfaction nurses normally feel when good work has been accomplished.

WHO, together with UNICEF, will help by providing nursing instructors in selected schools of nursing in all the countries of the region during 1951. These instructors will teach in the lecture rooms, hospital wards, and clinics, and will also give assistance in revising nursing-training methods and curricula to suit the needs of each particular country or area. Instructors in public-health nursing will also be provided for selected training schools. Public-health nurses attached to UNICEF/WHO field projects are already giving assistance and guidance to health visitors, midwives, and other health workers.

In Thailand, it is proposed that a WHO nurse consultant be appointed to assist in setting up a nursing division within the Ministry of Health and in making a study of nursing needs for long-range planning to make the country self-contained in nursing administration and teaching.

### Consultant Services

Expert consultants have advised governments in South-East Asia in problems relative to malaria, tuberculosis, venereal diseases, filariasis, goitre, typhus, poliomyelitis, hospital dietetics, and medical education. An example of the type of service which these experts have rendered is found in the work of an expert who surveyed the filariasis situation in Ceylon and who was retained by the Government to organize an intensive training course for national health workers and to initiate control measures based on the findings of his survey. Another example is provided by the team of three experts who visited India early in 1949 to advise the Government on the poliomyelitis situation in that country. After conducting a survey and holding orientation courses in the four big towns in India, the team submitted a report to the Government outlining plans for rehabilitation and physiotherapy centres and for training the requisite personnel. One of the members of the team remained, at the request of the Government, to start one such training centre in Bombay.

### Fellowships

In 1949 and 1950 WHO awarded a total of 71 fellowships to the following countries of the South-East Asia Region : Afghanistan, 3 ; Burma, 3 ; Ceylon, 15 ; India, 31 ; Thailand, 16 ; and Portuguese India, 3. These fellowships were for periods of study, up to 12 months, in countries where specialized training is available in public-health subjects such as tuberculosis, malaria, venereal diseases, sanitary engineering, nursing, paediatrics and child care, and public-health administration.

### Provision of Medical Supplies and Teaching Equipment

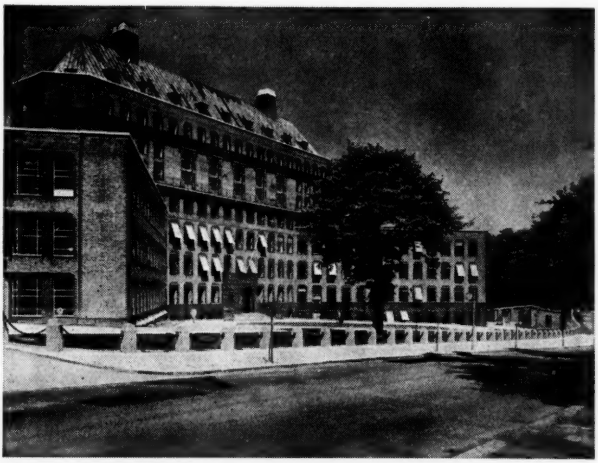
To meet emergency needs in South-East Asian countries for medical literature and teaching equipment, WHO in 1949 made available a total of $40,600, distribution being as follows : Afghanistan, $2,500 ; Burma, $15,000 ; Ceylon, $2,000 ; India, $14,100 ; and Thailand, $7,000. An additional allocation of $13,600 was made during 1950 : Afghanistan, $1,600 ; Ceylon, $5,500 ; India, $5,000 ; and French India, $1,500.

To help supply DDT needed for national malaria-control projects, WHO assisted three South-East Asian Governments in 1950 : Afghanistan, $11,000 ; India, $25,000 ; Thailand, $16,320.

## RECENT EPIDEMICS AND THE WORLD INFLUENZA CENTRE

A new influenza epidemic invaded Europe during the winter of 1950-1. It probably originated in Sweden where a local outbreak of the disease was observed in June 1950. Other primary foci seem to have existed in Northern Ireland and in the regions of San Sebastian and Bilbao in Spain. The epidemic was first reported in Denmark, in November 1950, then in Norway and Sweden. In December Belgium was affected, but by 15 January 1951 the epidemic was thought to be over in that country. From Northern Ireland, where it was prevalent at the end of 1950, influenza passed on to England and Scotland. In Great Britain the epidemic was the most widespread for fourteen years. The cities of Liverpool and Newcastle in particular became outstanding epidemic foci. At Liverpool there was one week when the mortality attained the highest figure observed

**FIG. 4. INFLUENZA EPIDEMIC — I**



National Institute for Medical Research, Mill Hill, London, where the World Influenza Centre is located

during the 1918-9 epidemic, but this time young adults were not the victims ; in 1950-1 deaths occurred principally in age-groups above 55. It should be added that the use of sulfonamides and antibiotics now makes it possible to prevent or cure the pulmonary complications which caused such a high mortality in 1918-9.

In the middle of January two epidemic waves reached France, one coming from the north, the other from northern Spain.

The epidemic also appeared in Andorra, Finland, western Germany, Gibraltar, Greece, Iceland, Malta, the Netherlands, Switzerland, Turkey, and Yugoslavia. Everywhere the disease has been of a mild type.

In the other continents, epidemic outbreaks have been reported from Algeria, Brazil, Israel, Japan, Lebanon, Peru, and the USA, but the extent of these outbreaks will only be known later, when numerical data are available.

The first serological examinations carried out in the national centres and at the World Influenza Centre (WIC), established by WHO in London, show that the virus responsible for the main 1950-1 epidemic belongs to type A. Certain more precise determinations indicate that the A-prime type is the one most frequently involved. It may be recalled that the epidemics of 1946-7 and 1948-9 were also caused by the A-prime virus. As is known, the various virus strains taken from patients are sent by the national influenza centres—after a preliminary examination—to the World Centre in London, which determines the types involved so that vaccines may be prepared and an epidemiological study of the disease made on a worldwide scale. The work of the World Influenza Centre started during the 1948-9 epidemic, and the results of the studies made in this connexion have just been published in the *Bulletin of the World Health Organization*.[1]

**FIG. 5. INFLUENZA EPIDEMIC — II**

Testing for the presence of the influenza virus A by inoculation of a ferret, one of the few laboratory animals susceptible to the disease

The authors of this article, Dr. C. M. Chu, Dr. C. H. Andrewes, and Mr. A. W. Gledhill of the World Influenza Centre, London, after describing in detail the spread of the epidemic, discuss the various serological methods which may be employed for determining the types of influenza

[1] *Bull. World Hlth Org.* 1950, 3, 187

virus and describe the results of the study of 20 of the 86 strains received during the epidemic. Their conclusions have been summarized as follows :

The 20 strains showed considerable similarity in haemagglutination tests and on examination by electron-microscopy. The authors describe the method used for carrying out a haemagglutination-inhibition test and discuss in detail the advantages of removing the non-specific inhibitor by crude filtrate of cholera vibrio cultures. In analysing the results of this test, the authors introduce the idea of an " antigenic ratio " between strains, making it possible to take into account the factor of reactivity or avidity, which has already been suggested by other authors.

When compared with old strains according to the methods described, the 1948-9 A viruses proved to be of the A-prime type. None of them was related to the WS or PR8 strains. Antigenically, the viruses of the 1948-9 epidemic constitute a more homogeneous group than those studied until now. They are also so closely related to the strains of the 1946-1947 epidemic that it is difficult to distinguish with any certainty between the two groups. The results of other serological tests contributing to the differentiation of the virus strains—strain-specific complement-fixation, and neutralization in eggs and mice—are included.

Ten strains of virus B isolated during localized epidemics which occurred simultaneously with virus A epidemics were received at the laboratory. For the initial typing, the authors used the complement-fixation test with antigen prepared from chorio-allantoic membrane and type-specific human sera. This test gave better results than the haemagglutination-inhibition test.

In discussing the results of these experiments, the authors mention two views concerning the origin of the epidemic : one, that it spread from an initial focus ; the other, that it was due to the renewed virulence of endemic viruses in different countries. The antigenic homogeneity of the viruses which caused the epidemic in the various regions supports the first hypothesis. It seems likely that the homogeneity revealed by the serological investigation is due partly to the fact that the risks of variation in strains kept in laboratories have been reduced to a minimum in the studies carried out by the WIC. There is no doubt that different antigenic varieties of influenza virus do occur in nature. To estimate the true differences which exist between them, an effort must be made to control the factor of laboratory variation. For this purpose, freshly isolated viruses in chick embryos should be freeze-dried as soon as possible. Investigators engaged in serological research should agree to renew their standard viruses from a common stock as close as possible to the primary strain. The number of passages in eggs should be limited to a minimum, and in no case should a virus passed in mice or ferrets be used for antigenic studies.

# INTERNATIONAL SANITARY REGULATIONS

The draft International Sanitary Regulations, which are to be considered by a special committee of the Fourth World Health Assembly in April 1951, were reaching a final stage of preparation when the Expert Committee on International Epidemiology and Quarantine met for its third session, held in Geneva from 9 to 18 October 1950. [1] It was the committee's task to review, and to incorporate in the Regulations in so far as practicable, the comments made by governments and international bodies concerned. Drs. M. T. Morgan and M. Gaud, of the Office International d'Hygiène Publique, were appointed to assist the Secretariat and the Legal Subcommittee of the parent committee in preparing the final draft of the Regulations.

The committee decided to limit the scope of the draft Regulations to the pestilential diseases—cholera, plague, relapsing fever, smallpox, typhus fever, and yellow fever—and to state expressly in the preamble that national health-administrations could take what measures against other communicable diseases, they considered necessary for their protection pending possible adoption by WHO of further international regulations. Special provisions relative to the sanitary control of the Mecca Pilgrimage are to be incorporated in an annex to the basic regulations.

The committee emphasized the need for all countries to adhere to the provisions of the new International Sanitary Regulations once they are in force and requested the Director-General to take all appropriate measures

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[1] The following took part in this session :

*Members* :

Dr. R. Dujarric de la Rivière, Sous-Directeur de l'Institut Pasteur, Paris, France
Dr. G. L. Dunnahoo, Medical Director, Chief, Division of Foreign Quarantine (US Public Health Service), Washington, D.C., USA (*Chairman*)
Dr. H. S. Gear, Deputy Chief Health Officer for the Union of South Africa, Cape Town, Union of South Africa
Professor Ahmed Halawani, Director, Research Institute and Hospital of Tropical Disease, Cairo, Egypt
Dr. J. M. Lentjes, Medical Director, Stoomvaartmaatschappij Nederland, Amsterdam, Netherlands
Dr. M. D. Mackenzie, Principal Medical Officer, Ministry of Health, London, United Kingdom
Dr. G. H. de Paula Souza, Director and Professor, Faculty of Hygiene and Public Health, University of São Paulo, Brazil (*Vice-Chairman*)
Dr. K.C.K.E. Raja, Director-General of Health Services, New Delhi, India

*Ex officio Member* :

Dr. M. T. Morgan, Président du Comité permanent de l'Office International d'Hygiène Publique ; Port of London Authority, London, United Kingdom

*Representative of the United Nations* :

P. de Bellaigue, Division of Transport and Communications, Lake Success, N.Y., USA

*Observers* :

ICAO :

R. J. Moulton, Chief, Facilitation Section, International Civil Aviation Organization, Montreal, Canada
Dr. F. de Tavel, Medical Adviser, International Civil Aviation Organization, Montreal, Canada

OIHP :

Dr. M. Gaud, Directeur de l'Office International d'Hygiène Publique, Paris, France

*Secretaries* :

Dr. Y. M. Biraud, Director, Division of Epidemiology, WHO
Dr. G. Stuart, Chief, Sanitary Conventions and Quarantine Section, WHO

*Also present* :

M. J. Hostie, Chairman, Legal Subcommittee of the Expert Committee on International Epidemiology and Quarantine

to enable countries not members of the Organization to be informed of the Regulations and invited to conform to them. While recognizing that imposing on countries new obligations regarding international health is the exclusive prerogative of the World Health Assembly, the committee considered that the Executive Board might usefully define recommended practices, methods, and procedures for disinsectization, deratting, etc., and establish standards for vaccines and other substances, diagnostic procedures, and sanitary techniques whose adoption by national health-administrations would aid in complying with the International Sanitary Regulations.

Problems associated with the changing concept from a defensive to an offensive approach in public health confronted the committee in drafting the Regulations. Some of the quarantine measures imposed by governments are now regarded as of little medical value. While certain restrictions must be maintained, it is felt that these should be kept to a minimum and should interfere as little as possible with international traffic and shipping. In other words, the medical advantages of quarantine restrictions should be of sufficient value to balance against the disadvantages imposed upon communications, commerce, traffic, and travellers. It is WHO's responsibility to decide what the maximum restrictions should be and to see that national health-administrations do not exceed the limits established. Individual States should rely more on measures for increasing resistance to communicable diseases within their borders than on restrictions to prevent the entry of infection, particularly since " barriers " short of absolute cessation of movement are of only limited and relative value in excluding infection from a country.

These are some of the considerations which must be taken into account by the special committee which meets before the Fourth Health Assembly and by the Assembly itself before final adoption of the International Sanitary Regulations. The chief difficulty lies in finding a satisfactory, constructive answer to these critical arguments, complete acceptance of which might mean abandonment of most quarantine restrictions now in force. International health regulations must follow the trend of all international legislation and practice towards reducing arbitrary action against international traffic and, at the same time, must afford adequate protection to countries against importation of the pestilential diseases. The Fourth World Health Assembly will decide whether or not the new International Sanitary Regulations meet these requirements.

# TREATMENT OF TUBERCULOUS MENINGITIS

## Three Years' Experience

Professor C. Cocchi, Director, Department of Paediatrics, University of Florence, has carried out some pioneer work in the treatment of tuberculous meningitis with streptomycin. In December 1946, by which date the first tests had already revealed the high toxicity of this antibiotic, he began experimental and clinical research with the object of reducing the toxic effects of the new drug by limitation of the dosage. The harmful effects seemed to him doubly dangerous : on the one hand, streptomycin might affect the nervous system and on the other it appeared to inhibit certain biological processes related to the immunization of the human organism.

By combining intrathecal and intramuscular injections he obtained excellent results with doses of the antibiotic five or ten times lower than those which had generally been administered. In addition, he experimented with associated therapy : streptomycin-promin or streptomycin-*p*-aminosalicylic acid, the effects of which were extremely satisfactory.

The efforts made during three years of research and clinical experience, together with the results obtained from the new therapeutic techniques as applied in the Ospedale Meyer, Florence, have been described by Professor Cocchi and Dr. G. Pasquinucci in the ***Bulletin of the World Health Organization.***[1]

The following summary gives the essential points of this study :

From December 1946 to December 1949 a total of 385 cases of bacteriologically confirmed tuberculous meningitis were treated in Florence ; 359 of these cases were treated in the Ospedale Meyer and the remainder in the Casa di Cura del Bambino. From the outset, special attention was paid to limiting the dosage of streptomycin, whether administered intramuscularly or intrathecally. It was found that, by giving small intrathecal injections in conjunction with intramuscular application, it was possible to obtain cures without increasing the intramuscular dosage, and thus to avoid the toxic and generally deleterious effects of large doses of the antibiotic.

The daily intramuscular dosage, in mg per kg of body-weight, given in two injections, was approximately 10 mg for adults, 20 mg for children over 2 years, and 30 mg for children under 2. The corresponding daily intrathecal doses were 1 mg, 2 mg, and 3 mg respectively ; in 1949, the intrathecal injections were given twice daily for the first month, once daily for the second and third months, and then once every other day until normality of cerebrospinal fluid was reached.

An associated dosage of 0.10 g per kg of body-weight per day of a 60% solution of promin, in one or two intravenous injections, permitted

[1] *Bull. World Hlth Org.* 1950 3, 215

smaller dosage of streptomycin, and drug resistance appeared to develop more slowly during combined therapy. Associated treatment with *p*-aminosalicylic acid (PAS) was effective in over 100 cases. The PAS was given orally (as sodium salt, 0.30 g per kg per day, in 3 doses), by intravenous drip (0.50-0.75 g per kg per day, in terms of free acid, for 1-5 months), or intrathecally (as sodium salt, in doses of 50-100 mg for lumbar, 50 mg for cisternal and ventricular, and 150-200 mg for subdural routes). Symptoms of intolerance were observed in 5% of cases receiving promin, but only rarely in those receiving PAS.

Local therapy was based on a systematic study of the process of upward diffusion of streptomycin after lumbar puncture. An index of diffusion (ID), defined as :

$$\frac{\text{units of streptomycin per ml of cisternal fluid}}{\text{units of streptomycin per ml of spinal fluid,}}$$

was determined in each patient every 15-20 days. When the protein level in the spinal was much higher than in the cisternal fluid, the ID was usually below 0.5. Routes of injection indicated by ID values were : below 0.2, suboccipital ; 0.2-0.5, one lumbar after each two cisternal ; 0.5-0.75, alternate lumbar and cisternal ; over 0.75, lumbar only. Subdural therapy was used in serious cases of tentorial block, sometimes in conjunction with ventricular drainage.

General treatment included administration of large doses of vitamins, blood transfusions, and administration of barbiturates and pentothal where necessary.

Treatment was continued until the fluid became normal, which was generally after 6-7 months, and was prolonged for the last two groups of patients 1-3 months beyond the normalization of cerebrospinal fluid. Increase in intensity of the Mantoux reaction, usually accompanied by a return to normal of the sedimentation-rate, often preceded attainment of fluid normality. " Intolerance " of intrathecal treatment was interpreted as an indication of a change of route of administration, a reduction in dosage, or the use of a new batch of streptomycin, but never a suspension of the therapy. Especially in the first months of treatment a suspension of the therapy is always considered as dangerous.

A study of the alterations in the composition of cerebrospinal fluid gave valuable indications for therapy. A reduction of the glucose level in the cerebrospinal fluid to below 0.4 g per 1,000 ml frequently permitted early diagnosis of tuberculous meningitis. Protein levels in spinal and cisternal fluids determined the route of injection ; protein levels of over 2.0-3.0 g per 1,000 ml in the cisternal fluid were taken as indications for ventricular injection, and so were ocular signs, hypertension, and comatose condition, regardless of protein levels.

Of 129 strains of tubercle bacilli isolated from cerebrospinal fluid, 38 were resistant to 5 $\gamma$ per ml, or more, of streptomycin. There was an evident relation between streptomycin resistance and mortality, and between appearance of resistance and duration of therapy. It was found that patients who had relapses and from whom streptomycin-resistant organisms were isolated responded well to treatment with PAS and streptomycin. Of 38 patients with bacilli resistant to 2 $\gamma$ per ml, or more, 23 were given PAS and streptomycin ; 13 of these are alive whereas the 15 patients not treated with PAS all died.

Of the 267 patients who were admitted between December 1946 and June 1949, and received treatment at the Ospedale Meyer only, 147 have survived and 129 have normal cerebrospinal fluid. The general condition of all the cured patients is very good. In only 14 of them have sequelae persisted ; 4 have slight hemiparesis, 1 has slight facial paresis, 1 has paraparesis, 3 are slightly deaf, and 5 show defective psychomotor development.

Techniques for microscopic demonstration of tubercle bacilli in cerebrospinal fluid, and for catheterization and controlled-pressure drainage, are described in annexes.

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# *Notes and News*

## Leprosy Consultants in Ceylon and Ethiopia

The latest methods in leprosy therapy are being demonstrated in Ceylon and Ethiopia by WHO consultants. Dr. R. G. Cochrane, Director of Leprosy Research at the Chingleput Sanatorium, South India, has gone to Ceylon, where he will work in leprosy hospitals and demonstrate recent advances in bacteriology and pathology relating to leprosy at the Medical Research Institute. Dr. Cochrane will, in his own words, aim " to stimulate the medical profession and others to a deep realization that nowadays leprosy need no longer be regarded as a curse sent upon man which has forever to be endured ". He believes that there are now possibilities in both therapy and prevention which may make the conquest of leprosy a reality.

In Ethiopia, about 700 leprosy patients will be given Sulphetrone [1] treatment for a year as a result of the visit of WHO consultant Dr. M. A. K. Dalgamouni, Director of the Leprosy Control Section of the Egyptian Ministry of Health. In addition to visiting leprosaria, where he demonstrated the use of the new drug, Dr. Dalgamouni made a survey of secondary school pupils to try to discover fresh cases.

In the visits of both the WHO consultants, attention is called to the importance of rehabilitation measures for those handicapped by leprosy. For example, when Dr. Dalgamouni returned to the leprosarium at Akaki a week after he had told patients that treatment would be more effective if they kept themselves usefully occupied, he found

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[1] Sulphetrone is a proprietary name. Its chemical formula is given as : tetrasodium 4 : 4'-*bis*-(γ-phenylpropylamino)-diphenylsulfone-α : γ : α' : γ'-tetrasulfonate.

The mention of manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature which are not mentioned.

that some of them had started digging gardens in the grounds of the hospital. He recommended that a social worker be appointed to sustain this effort and to find other forms of useful activity for patients able to participate in them.

## Japan Seeks WHO Membership

An application for full membership in WHO has been received from Japan. A letter from Shigeru Yoshida, Minister for Foreign Affairs, dated 6 February 1951, indicates the Japanese Government's willingness to abide by the principles of the WHO Constitution and to fulfil all required obligations.

Action on admitting Japan to the Organization will be taken at the Fourth World Health Assembly, which is to open in Geneva on 7 May. According to the Constitution, States which do not belong to the United Nations can be admitted to WHO by simple majority vote of the Health Assembly.

To date, 74 countries have joined WHO as full Members and one, Southern Rhodesia, as an Associate Member.

## WHO Plans Expanded Fellowship Programme

Fellows from the Eastern Mediterranean Region will number 74, according to WHO plans for 1951. These represent an allocation of $130,000, which amount will be increased to $150,000 for new fellowships in 1952. In South-East Asia, it is proposed to grant 161 fellowships, of a total value of $329,000, during 1951 and 1952.

WHO fellowships are given to candidates approved by the national governments of the region concerned. They are awarded for study, for periods up to 12 months, on subjects such as tuberculosis, malaria, venereal diseases, nursing, paediatrics, public-health administration, etc. In a few countries, such as Ethiopia, long-term programmes of basic medical education are undertaken ; 17 fellowships for undergraduate studies in medicine will be granted to that country in 1951. In addition to its own regular fellowship programme, WHO will administer fellowships awarded by the United Nations Technical Assistance Board and by UNICEF.

## Léon Bernard Foundation Award

Professeur R. Sand, of Belgium, has been nominated by a committee of the World Health Organization to receive the Léon Bernard Foundation Prize. This award, consisting of a medal and a sum of 1,000 Swiss francs, is given for practical achievement in social medicine in accordance with the provisions of an international subscription raised in memory of Professeur Léon Bernard, of France, a member of the Health Committee of the League of Nations. It was last awarded in 1939.

Professeur Sand, a pioneer philosopher, historian, and teacher of social medicine, holds the chair of social medicine at the University of Brussels. The Léon Bernard award will be presented to him at the Fourth World Health Assembly.

## Third Award of Darling Foundation Prize

For the first time since 1938, the Darling Foundation Prize, an award established by the League of Nations in honour of the malariologist S. T. Darling, has been presented. Recipients are two British scientists, Professor H. E. Shortt and Dr. P. C. C. Garnham, whose work on the life-cycle of the malaria parasite in man and monkey led the WHO Expert Committee on Malaria to nominate them for this honour. Professor Shortt, who is an authority on tropical medicine, occupies the chair of Medical Protozoology at the University of London and is President of the Royal Society of Tropical Medicine

and Hygiene. Dr. Garnham, who spent many years in Africa in the British Colonial Service, where he became widely known for his studies in tropical medicine and the epidemiology of malaria, is Reader in Medical Parasitology at the University of London.

The Darling Foundation Prize, which consists of a bronze medal and a sum of 1,000 Swiss francs, is now administered by WHO. Following approval by the Executive Board, the award was presented to Professor Shortt and Dr. Garnham at a meeting of the Royal Society of Tropical Medicine and Hygiene, in London, by Sir Gordon Covell, member of the Darling Foundation Committee and Chairman of the WHO Expert Committee on Malaria at its fourth session.

## Executive Board Approves Action on Yellow-Fever Epidemiological Questions

The Executive Board at its recent session gave its approval to the inclusion of Tanganyika Territory in the African endemic yellow-fever area.[2] This decision was reached on the basis of a request made by the Government of the United Kingdom, and approved by the Government of Tanganyika, following recent investigations on the distribution of immunity to yellow fever in East Africa.

In another resolution concerning yellow fever, the Board approved the Stanleyville Laboratory, Belgian Congo, for the carrying-out of seroprotection tests required for the international certification of immunity against yellow fever.

## Bilharziasis Survey Reveals Infected Areas

The bilharziasis survey being conducted in the Middle East by Dr. M. Abdel Azim Bey [3] has revealed infected areas in Saudi Arabia, Syria, and Iraq. The investigation in Saudi Arabia began in a village from which Arab oil-workers who were reported to be infected had come. In examining schoolchildren from this village, Dr. Azim found 22 out of 25, between the ages of seven and twelve, infected with bilharziasis. The source of the disease was discovered to be snail-infested water channels used for irrigation purposes. Dr. Azim believes that it should be relatively easy to clear up this infestation with copper sulfate. In the Riad area, in east-central Saudi Arabia, vector snails were found in rainwater pools used as a general source of water and for bathing. Incidence of the disease among schoolchildren there reached 60% in some cases.

In Iraq, control measures will be more difficult because the source of infection is snail-infested lakes. In certain areas in Syria, where sluggish rivers provided a habitat for the snails, incidence of bilharziasis was revealed to be 60-70%.

The results of Dr. Azim's investigation, together with recommendations for control measures, will be communicated to the countries concerned by the WHO Regional Office for the Eastern Mediterranean.

## Istanbul Tuberculosis Centre Opens

The WHO Tuberculosis Control Demonstration and Training Centre at Istanbul [4] will now be housed in a new $130,000 building which was officially opened in February. The new building contains a laboratory, a dispensary, a radiological department, a vaccination department, and a section for social services and administration.

At the opening ceremonies—attended by the Governor of Istanbul ; Dr. E. H. Ustundagh, Minister of Health of Turkey ; diplomatic representatives of the countries of the

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[2] See *Chron. World Hlth Org.* 1948, **2**, 232 ; 1950, **4**, 53.

[3] *Chron. World Hlth Org.* 1950, **4**, 381

[4] *Chron. World Hlth Org.* 1950, **4**, 154

WHO Eastern Mediterranean Region ; and Drs. J. McDougall and D. Thomson, from WHO Headquarters—Dr. E. Berthet, WHO Tuberculosis Consultant and Head of the Istanbul Centre, gave a progress report on the work accomplished in Turkey in the last year. Three hundred doctors and other medical personnel have been given training courses in tuberculosis control, 10,000 radiological and 8,000 tuberculin tests have been made, and 3,000 non-infected persons have been vaccinated.

## Public-Health Consultant Sent to Egypt

Dr. S. F. Farnsworth, Public Health Officer of the City of Oakland, California, has been appointed as a WHO public-health consultant. He has undertaken a three-month assignment to aid the Government of Egypt in setting up a health demonstration area in the district of Qalyub, north of Cairo.

## WHO Nursing Consultant Visits South-East Asia

During a recent mission to Asia, Miss Olive Baggallay, WHO Nursing Consultant at Geneva Headquarters, visited some of the WHO field teams in Borneo, Burma, India, Malaya, and Thailand.

Joint WHO/UNICEF projects in these countries are assisting in the training of nurses and midwives and in the development of teaching facilities in hospital and public-health services. Main emphasis is being placed on the preparation of maternal and child health workers to strengthen programmes in this field.

In Penang, a well-established school of nursing is being expanded to receive student nurses for part of their training from the small hospitals in the Federal States. The school is being assisted with equipment and with three nurse instructors who are separately engaged in classroom teaching, clinical midwifery, and public health.

Miss Baggallay was accompanied on her visits by the WHO nursing advisers of the region concerned, and opportunity was taken to consult with the government authorities concerning plans for the development of their nursing services.

## Dietetics Consultant Completes Indian Mission

Miss E. Stephenson, WHO Dietetics Consultant, has completed a four-and-a-half-month assignment in Calcutta, where she helped to establish a special diet kitchen in the Calcutta Medical College Hospital and gave advice on the setting-up of a dietetics course at the All-India Institute of Hygiene and Public Health. The hospital kitchen has now been completed and an ex-army cook appointed to take charge. In organizing the dietetics course at the All-India Institute, Miss Stephenson emphasized teaching practical cookery to students.

## Thailand Yaws-Control Project

In villages and towns of Rajburi Province, Thailand, Buddhist temples are being utilized for both clinics and living accommodation by WHO itinerant teams which are launching large-scale yaws-control operations. According to Dr. D. R. Huggins, senior adviser with the teams, these temples serve this purpose well, particularly since they are situated next to the village schools, which facilitates examining schoolchildren. It is estimated that four-fifths of those suffering from the infective stage of yaws are persons under 18 years and women of child-bearing age.

Penicillin, equipment, and international personnel for this project are being provided by UNICEF. In seven months of activity, penicillin treatment administered by the teams has arrested the infective stage of the disease in more than 11,000 cases. Two injections

only have been found sufficient to clear up the symptoms of the disease, which is estimated to affect some 200,000 people in Thailand.

On 1 April 1951, the international staff will begin to train an additional 88 sanitary inspectors and 15 medical officers so that the control operations may be progressively extended to other areas of Thailand.

## Indonesian Antiyaws Campaign

Dr. C. M. Hasselman, WHO senior adviser in the antiyaws campaign which was launched in Indonesia last summer,[5] has reported that more than 83,000 injections of penicillin had been given to yaws sufferers by the end of January 1951. Treatment was given to all infectious cases discovered in examination of 320,000 persons.

Dr. Hasselman has replaced Dr. K. R. Hill, who left the demonstration team in September 1950.

## Typhus Control in Afghanistan

WHO procured for the Afghan Government, on a reimbursable basis, 20,000 ml of antityphus vaccine, sent to Afghanistan by air from New York in early February. The vaccine will be used to aid in the WHO-assisted campaign [6] against annually recurring typhus outbreaks—in Kabul, the capital, and in Kandahar, in the southern part of the country, in particular. DDT spraying is another important aspect of the campaign, and Dr. S. L. Dhir (India), who is in charge of the Kandahar operations, has reported that 11,000 women were treated by five squads during the first month.

## Tuberculosis Centres in India

Six workers recruited by WHO for the UNICEF-assisted tuberculosis demonstration and training centres which are being established in Delhi and Trivandrum have arrived in India—Dr. G. Hertzberg (Norway), formerly tuberculosis expert with the Oslo Public Health Service ; Miss A. Gerhardsen (Norway), previously teacher of nursing at the Public Health Teaching Centre of Oslo ; Miss M. Hudson (Canada), previously chief nurse at the Tuberculosis Rehabilitation Centre for Refugees in Germany ; Dr. E. Nassau (Great Britain), pathologist, since 1939, at the Harefield Hospital, Middlesex, England ; Dr. A. Nelson (Sweden), formerly Medical Director of the Mass Radiography Section of the Swedish Royal Medical Board ; and Mr. K. W. Noschis (Finland), formerly x-ray adviser at the Optical Department of the Royal Technical Institute at Stockholm. Dr. Hertzberg and Miss Gerhardsen have been assigned to the Trivandrum centre ; Miss Hudson will go to Delhi ; Drs. Nassau and Nelson and Mr. Noschis will have their headquarters in Delhi but will also visit the other centres in India to give advice in their specialities.

The Delhi and Trivandrum centres are the first of six which are planned for the South-East Asia Region, with UNICEF and WHO assistance. Others will be located in Patna (India), Colombo (Ceylon), Rangoon (Burma), and Bangkok (Thailand).[7]

## Ceylon Fellows To Study in America

Dr. D. A. Jayasinghe, District Medical Assistant of Kegalla, Ceylon, and Dr. (Mrs.) I. Jayawardene, of the De Soysa Maternity Hospital, Colombo, have been granted WHO

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[5] *Chron. World Hlth Org.* 1950, 4, 193

[6] See page 47.

[7] *Chron. World Hlth Org.* 1950 4, 154

fellowships. Both will go to America in August to study at the Johns Hopkins School of Hygiene and Public Health, Baltimore, Md., where they will specialize in venereal diseases.

### New Headquarters for PASB

The Pan American Sanitary Bureau (PASB), WHO Regional Office for the Americas, has purchased for its headquarters the Hitt House, 1501 New Hampshire Avenue, N.W., on Dupont Circle, Washington, together with the adjoining Blodgett House, at 1515 New Hampshire Avenue. Purchase of the properties was facilitated by the W. K. Kellogg Foundation and the Rockefeller Foundation, which advanced funds for a number of years on a reimbursable basis.

### Antityphus Campaign in Peru

An intense campaign to reduce the incidence of typhus has been launched by the Peruvian National Health Department, with the technical assistance of the Pan American Sanitary Bureau, WHO Regional Office for the Americas, and with supplies and equipment provided by UNICEF. Operations began in the area surrounding the city of Cuzco, ancient capital of the Incas, which suffered a devastating earthquake in May 1950. From the start of the campaign, on 16 October 1950, to 31 December, 64,213 persons and 23,568 dwellings were treated with DDT. It is planned to extend the control programme to other areas in the province of Cuzco and eventually to include the entire country of Peru.

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# *Views on WHO*

**Third World Health Assembly**

In a report on the Third World Health Assembly, published in the *Journal of the American Medical Association*, Chicago (1950, **144**, 451), Dr. Edward J. McCormick writes :

..." In these troubled times of disturbed economics and political unrest (and susceptibility of lesser nations to adopt undemocratic ideologies), it is becoming apparent that improvement in health is a *sine qua non* in improving understanding among nations.

" I think it will be found that the WHO will play a far reaching part in the United Nations' program of technical assistance for underdeveloped areas. In many areas economic progress is impossible without substantial improvement in public health. Diseases such as malaria, tuberculosis and syphilis take a huge toll in incapacitation and lack of production. From the experience of the past few years, it is clear that control campaigns are technically feasible and can be conducted at a relatively low cost. DDT and penicillin are key weapons in combating tropical, debilitating diseases, such as malaria and yaws. When these weapons are used in a planned attack, the inroads of disease on populations of wide areas are greatly reduced.

" It has been shown that the general improvement in health results in an increase in the productivity of the people. It is expected that in several of these campaigns WHO will collaborate closely with the United Nations' Food and Agricultural Organization... I was greatly impressed by my observations at the Third

World Health Assembly. The World Health Organization is engaged in a gigantic task. It is concerned with raising standards of medical education, fortifying national health services, assisting in control campaigns against infectious diseases and codifying and classifying medical information of international importance. The WHO works closely with the World Medical Association on technical problems. It works with governments in raising health standards in member countries. It is assisted and supported by a number of international organizations dealing with special problems of health. The WHO is meeting a real need in this shrinking world in fulfilling the obligations of an international public health agency."

**Food and Population**

An editorial which appeared in the *American Journal of Public Health*, Albany (1950, **40**, 1008), comments on the importance of public-health work as part of a general programme to raise the standards of living in the underdeveloped areas :

..." In a broad sense, the objectives of the FAO and the WHO are parallel and mutually advantageous. From a narrower and more immediate view, however, there is an apparent conflict. The prosperity and satisfaction of a given people at a given time depends on a balance between its resources and its population and the basic problem of the underdeveloped areas is that they do not produce food enough to keep their people alive. Furthermore, there are evidences that the balance has been moving in the wrong direction in recent years. A report made at the meeting of the Milbank Memorial Fund last winter showed that during the decade 1938-1948, the world population increased by about 8.3 per cent, while its aggregate supplies of calories, total protein, vegetable protein, animal protein, and milk protein increased by figures ranging from 0.7 per cent to 6.4 per cent.

" It is not unnatural, under these circumstances, that population experts should raise the question whether public health programs in the underdeveloped areas may do more harm than good by saving children from dysentery and young men from tuberculosis only to have them perish by malnutrition. The implied conclusion is that we should soft-pedal on WHO and go actively forward with FAO.

" This is a challenge which cannot be lightly dismissed ; and it has on its side the emotional reaction to which the timid are so prone, which always fears the new path and clings to the old one. On the whole, however, it does not seem to us that such fears are justified. Modern public health does not prevent death alone. It also prevents disease. For every life preserved by a tuberculosis program, scores of individuals are saved from invalidism. For every life saved from malaria, hundreds of individuals are maintained as active producers in the population. In Greece, for example, malaria control in certain areas has vastly increased crop production... "